

Spelling and reading in Bengali

We examined the relationship between reading and spelling skills in children learning to read and write Bengali. In this paper, we discuss the challenges imposed on young learners by the orthographic and phonological peculiarities of the Bengali language.

Bengali: a brief introduction

In order to place Bengali on the continuum of difficulty associated with letter-sound correspondences we need to answer two questions:

- Would knowledge of akshara help in reading Bengali words?
- Would knowledge of akshara help in spelling Bengali words?

The answer to the first question is ‘yes, in most cases.’ There are however some contexts where reading can be challenging. These are for words that carry the following: the akshara ঞ [e] which corresponds to two phonemes (as in *eka* /æk/ ‘one’, but *megha* /megh/ ‘cloud’); the vowel [a] which can be pronounced as /o/ in specific contexts: *kamala* /kɔmol/ ‘lotus’; and the vowel [a] which can be dropped word finally or medially from open syllables usually driven by morphological constraints (example: *AmarA* /amra/ *darbAra* /dɔrbar/). Other instances of akshara reading being challenging are in clusters with /m/, /b/ and /j/ as the second consonant. Here, one consonant of the cluster is not pronounced. Instead, the syllable undergoes a change (nasalization in the case of /m/ and germination in the case of /b/ and /j/). Most of the changes in the phonetic values of these akshara are regular and explainable under specific linguistic principles (linguistically driven).

The answer to the second question is ‘not quite often’. There are many words in Bengali which can be represented in more than one way. This is because many phonemes have more than one graphemic representation (/ʃ/, /dʒ/, /n/, /j/, /æ/, /ou/, and /oi/.) Geminates can be represented with two full graphemes p and r (as in চাপরাঙ্গী *chAprASi*), two half graphemes pr (as in *AprAn*) or with /j/ as the second consonant. The variation cannot be resolved phonologically as etymology is often the underlying reason for the shifts in akshara-sound linkages.

The essence of this discussion about the Bengali akshara is that phonemic values cannot be assigned to the consonants and vowels in a syllable without evaluating either or both the left or right context of a given akshara. Also, not all language-specific features of Bengali phonology and morphology are reflected in writing. Due to a number of such shifts in akshara-sound linkages imposed by Bengali phonology, learning to spell in Bengali seems to be more challenging for a young learner than learning to read.

Spelling skills in Bengali school children

We conducted a survey in Kolkata to study children’s spelling skills. The sample included 109 children aged between 6-9. The children were enrolled in four government aided schools in Kolkata, West Bengal. Among the children, 37 were in Grade 2 (*Mean age* = 7;1, *SD* = 0.42), 27 in Grade 3 (*Mean age* = 8;6, *SD* = 0.49), and 30 in Grade 4 (*Mean age* = 9;4, *SD* = 0.45). A group of 15 poor readers from Grades 3-4 (*Mean age* = 9;07, *SD*=0.62) were identified on the basis of their word reading scores and the level of their phonological skills. They were tested on 30 words for spelling, 15 word reading and 15 words for nonword reading.

Some findings from the study

There are four observations of interest in the study. First, even in Grade 4, learners of Bengali make spelling errors, with the profile of older poor readers similar to younger Grade 2 readers in the quantity and nature of spelling errors. This is an important finding since Bengali is sometimes seen as a transparent language which is apparently consistent in phoneme-grapheme correspondences, and it is important for us to examine what then slows down the pace of mastery of spelling. Second, the errors are largely phonological, where an akshara is omitted or substituted for another, rather than an entire word for another word. The substitutions appear to be at the level of the syllable rather than phoneme. Third, children make more consonant substitutions or omissions, particularly where the word has complex akshara (CCVs), and the graphemic structure cannot be retrieved from its pronunciation. Finally, word reading in all groups is consistently better than spelling.

Preliminary Conclusions

The scarcity of research in Bengali reading and spelling development is especially unfortunate because Bengali phonology and orthography possess a number of unique features, making Bengali an interesting test case for current theories of word recognition and spelling acquisition. Bengali has an elegant orthographic system: on the one hand, organised around a syllabic principle and therefore, sufficiently regular and predictable, on the other hand, with complex orthographic conventions and representation, where learning depends on learning supports especially from reading and spelling experience and exposure to print. This combination of regularity and complexity is what makes Bengali orthography interesting for comparative reading research. Our spelling data suggests that the aspects of Bengali akshara that have a simple akshara-sound linkage are easier to learn and those that have a changing akshara-sound linkage are more challenging. These differences about the akshara have implications on how we teach children the Bengali akshara. It is clearly simply not enough to have them memorise lists of akshara! Children need to see and spell akshara in a whole range of different words to understand their changeable nature when embedded in words. A good dictum for such learning is: *'More variety in reading is better fluency in reading'* and *'More creative writing is better spelling'*!

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